

Claims

- [c1] A Radio Frequency (RF) transaction securing system comprising:
a radio frequency identification (RFID) transaction device, including:
a RF operable transaction device transponder;
a transaction device processor in communication with said transponder;
a transaction device database in communication with said transaction device processor; and
a transactions counter in communication with said transaction device processor, said counter including a total transactions counted value.
- [c2] A system according to claim 1, wherein said transaction device database stores at least one of a transaction device authentication tag and an encrypted transaction device identifier.
- [c3] A system according to claim 2, further including a RFID reader operable to receive transaction device information from said transaction device via RF communications, said RFID reader comprising:
a RF operable reader transponder; and

a reader processor in communication with said transponder.

[c4] A system according to claim 3, wherein said RFID reader provides an interrogation signal for interrogating said transaction device.

[c5] A system according to claim 4, wherein said counter increments said total transactions value a predetermined value to be incremented in response to said interrogation signal, said counter further providing said incremented total transactions value to said transaction device processor.

[c6] A system according to claim 5 wherein said transaction device database provides said transaction device authentication tag and said transaction device encrypted identifier to said transaction device processor in response to said interrogation signal.

[c7] A system according to claim 6, wherein said processor provides at least one of said transaction device authentication tag, said transaction device encrypted identifier, and said incremented total transactions counted value to said transaction device transponder, said transaction device transponder for providing to said RFID reader transponder via RF communications.

- [c8] A system according to claim 7, wherein said RFID reader further comprises a reader database in communication with said reader processor.
- [c9] A system according to claim 8, wherein said reader database stores a reader authentication tag, said reader database further providing said reader authentication tag to said reader processor.
- [c10] A system according to claim 9, further comprising:
a merchant point of sale (POS) device in communication with said RFID reader; and
an account issuer in communication with said POS via a network.
- [c11] A system according to claim 10, wherein said RFID reader provides at least one of said transaction device authentication tag, said transaction device encrypted identifier, and said incremented total transactions counted value and said reader authentication tag to said POS, said POS forming a transaction request including transaction completion information and at least one of said transaction device authentication tag, said transaction device encrypted identifier, and said incremented total transactions counted value, and said reader authentication tag, said POS providing said transaction re-

quest to said account issuer.

[c12] A system according to claim 11, wherein said account issuer evaluates the validity of said transaction device in accordance with the total transactions counted value received.

[c13] A system according to claim 12, wherein said account issuer provides approval for transaction completion to said POS when said total transactions counted value is less than a predetermined maximum transactions value, and wherein said account issuer disallows the completion of a transaction when said total transactions counted value is greater than said maximum transactions value.

[c14] A system according to claim 13, wherein said account issuer evaluates the validity of said transaction device in accordance with the transaction device authentication tag received.

[c15] A system according to claim 14, wherein said account issuer evaluates the validity of said RFID reader in accordance with the reader authentication tag received.

[c16] A system according to claim 15, wherein said account issuer provides approval for transaction completion to said POS when said transaction device authentication tag is validated.

[c17] A system according to claim 16, wherein said account issuer provides approval for transaction completion to said POS when said reader authentication tag is validated.

[c18] A method for securing Radio Frequency (RF) transactions comprising the steps of:

providing an interrogation signal for interrogating a RF transaction device including a RF operable transaction device transponder;

providing a counter for counting the total transactions completed with the RF transaction device;

incrementing the counter value a predetermined incremental value when a transaction request is provided, thereby providing the total number of transactions completed with the transaction device; and

approving a transaction based on the value of the total number of transactions completed.

[c19] A method of completing a secure Radio Frequency transaction comprising:

providing a RFID transaction device including a counter for counting the number of transactions completed with the device; and

approving a transaction based on the number of transactions completed with the device.